

CLAIM AMENDMENTS

Amend claims: 2-10

1. (Original) A process for the removal of SO₂, HCN and H₂S and optionally one or more compounds from the group of COS, CS₂ and NH₃ from a first gas stream, which process comprises the steps of:
- (a) removing SO₂ from the first gas stream by contacting the first gas stream in a hydrogenation zone with a hydrogenation catalyst in the presence of hydrogen to obtain a second gas stream;
 - (b) removing HCN and optionally COS and/or CS₂ from the second gas stream obtained in step (a) by contacting the second gas stream in a hydrolysis zone with a hydrolysis catalyst in the presence of water to obtain a third gas stream;
 - (c) removing NH₃ from the third gas stream by contacting the third gas stream in a NH₃-removal zone with an aqueous acidic washing liquid to obtain an ammonium-comprising aqueous stream and a fourth gas stream;
 - (d) removing H₂S from the fourth gas stream by contacting the fourth gas stream in a H₂S-removal zone with an aqueous alkaline washing liquid to obtain a H₂S-depleted gas stream and a hydrogensulphide-comprising aqueous stream;
 - (e) contacting the hydrogensulphide-comprising aqueous stream obtained in step (d) with sulphide-oxidizing bacteria in the presence of oxygen in an oxidation reactor to obtain a sulphur slurry and a regenerated aqueous alkaline washing liquid;
 - (f) separating at least part of the sulphur slurry obtained in step (e) from the regenerated aqueous alkaline washing liquid and;
 - (g) recycling regenerated aqueous alkaline washing liquid obtained in step (e) to the H₂S-removal zone in step (d).
2. (Currently Amended) A process according to claim 1, wherein the sulphur-load in the H₂S-removal zone in step (d) is between 50 and 50000 kg/day, preferably between 75 and 20000 kg/day, more preferably between 100 and 10000 kg/day.

3. (Currently Amended) A process according to claim 2, ~~claim 1 or 2~~, wherein the total concentration of sulphur- compounds in the treated gas is below 30 ppmv, ~~preferably between 0.01 and 20 ppmv~~.
4. (Currently Amended) A process according to claim 3, ~~any one of claims 1 to 3~~, wherein the total concentration of H₂S is below 30 ppmv, ~~preferably between 0.01 and 20 ppmv~~.
5. (Currently Amended) A process according to claim 4, ~~any of claims 1 to 4~~, wherein the washing liquid in step (d) is buffered, ~~preferably at a pH of between 6 and 10, more preferably at a pH between 6.5 and 9~~.
6. (Currently Amended) A process according to claim 5, ~~any of claims 1 to 5~~, wherein the contents of the oxidation reactor in step (e) is buffered, ~~preferably at a pH between 6 and 10, more preferably between 7 and 9~~.
7. (Currently Amended) A process according to claim 6, ~~any of claims 1 to 6~~, wherein the oxidation reactor in step (e) has a volume of between 5 and 2500 m³.
8. (Currently Amended) A process according to claim 7, ~~any of claims 1 to 7~~, wherein the sulphur slurry obtained in step (e) is re-slurried, filtered and dried to obtain a sulphur-content of at least 95 wt%, ~~preferably at least 99 wt%~~.
9. (Currently Amended) A process according to claim 8, ~~any of claims 1 to 8~~, wherein water or steam or a mixture thereof is added to the second gas stream prior to contacting the first gas stream in a hydrolysis zone with a hydrolysis catalyst in step (b).
10. (Currently Amended) A process according to claim 9, ~~any one of claims 1 to 9~~, wherein the water/steam content of the second gas stream is between 10 v/v% and 80 v/v%, ~~preferably between 20 v/v% and 70 v/v%, more preferably between 30 v/v% and 50 v/v%, based on steam%~~.